

complicated and uncomplicated skin and soft tissue infections (SSTIs). **METHODS:** Five infectious disease experts from across Canada were interviewed to understand their current treatment practices. The interview responses were used to design a chart review of 100 patients from three acute-care facilities who were hospitalized for a SSTI caused by MRSS. **RESULTS:** Approximately 60–100% of SSTIs caused by MRSS are currently being treated with vancomycin and, in the majority of these patients, the entire treatment course (approximately 5–28 days) is received via IV infusion. Other therapies included fusidic acid and clindamycin. In all cases, IV therapy is initiated in hospital, although approximately 20–60% of patients are eventually able to be discharged to complete their IV therapy with the assistance of home care. Additional data collected in the survey include duration of intravenous (IV) therapy, frequency of switch to oral therapy, and length of oral therapy, hospital stay, and home IV care. **CONCLUSIONS:** Despite the proven economic benefits and wide acceptance of switch therapy, a large portion of patients with SSTIs caused by MRSS are currently completing their entire treatment course via IV infusion. The major reason cited is the lack of an effective oral therapeutic alternative. An oral antibiotic that is effective at treating these types of infections, therefore, represents cost-savings to hospitals by potentially reducing drug administration costs, hospital length of stay due to early discharge, and costs associated with home IV care.

PID19**AN ECONOMIC ANALYSIS OF CEFDINIR VERSUS LORACARBEF FOR TREATMENT OF ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS**Shah SN^{1,2}, Smith D¹, Copley-Merriman C²¹University of Michigan, Ann Arbor, MI, USA; ²Pfizer Pharmaceuticals Group, Ann Arbor, MI, USA

OBJECTIVE: To perform an economic analysis for the treatment of Acute Exacerbations of Chronic Bronchitis (AECB) comparing cefdinir 300mg twice a day for five days to loracarbef 400mg twice a day for seven days. **METHODS:** A randomized double-blind controlled trial conducted in twenty-four US centers between October 1995 and June 1997 collected data whether patients became cured or not after treatment with cefdinir or loracarbef as well as hospitalizations, clinic visits, and medications not related to the study medication. The final analysis is reported from a third party payer perspective. A total of 585 patients were randomized into two groups, 290 patients receiving cefdinir and 295 patients receiving loracarbef. Symptoms for inclusion criteria were cough and mucopurulent or purulent sputum production for three consecutive months. History or clinical evidence of other diseases and concomitant infections requiring systemic antimicrobial therapy were among the exclusion factors. **RESULTS:** The unadjusted cure rates for cefdinir and loracarbef were very similar at 82.4% (239/290) and 80% (236/295) using ANOVA. Comparable efficacy was

further supported through a probit regression showing an insignificantly higher cure rate for cefdinir of 10.3% ($p = 0.4903$). The unadjusted mean medical costs per case for loracarbef were \$345.03, 27.5 percent higher than cefdinir (\$270.60). An ordinary least squares regression, including patient characteristics as covariates, showed a cost savings of \$74.43 ($p < 0.001$) associated with cefdinir. **CONCLUSIONS:** The key findings of the economic analysis showed a significant cost savings by treating AECB with cefdinir 300mg twice a day for five days as compared with loracarbef 400mg twice a day for seven days. Furthermore, patients taking cefdinir had four less doses, resulting in a higher state of compliance and convenience.

PID20**TARGETING POPULATIONS AT-RISK FOR URINARY TRACT INFECTION COMPLICATION**

Doyle B, Hess G

CareScience, Philadelphia, PA, USA

OBJECTIVES: Urinary Tract Infection (UTI) was identified as the second most frequent complication at a large hospital, occurring in 3% of patients admitted, and contributing to \$1.4 million in costs, during the study period October 1998 to September 1999. This project was designed to increase hospital awareness concerning UTI complication, identify patient populations at-risk, and evaluate treatments. **METHODS:** Risk adjustment developed at the University of Pennsylvania School of Medicine was used to predict patients' hospitalization complications. Complication rates were compared between patients with and without UTI as a secondary diagnosis. Laboratory data were analyzed to identify whether patients with a secondary diagnosis of UTI met CDC laboratory diagnosis criteria. Differentiating patients by day of onset identified potentially nosocomial UTI's. Such patients were differentiated by DRG. Finally, the distribution of antibiotic treatments was determined. **RESULTS:** While the predicted complication rate for patients with UTI as a secondary diagnosis was 55.0%, their actual rate was 79.2% ($p < .001$). 55% of such patients met CDC laboratory diagnosis criteria; of these patients, 36% were diagnosed >3 days from admission, i.e., had potentially nosocomial UTI's. Four DRG's—Tracheostomy, PTCA, CHF, and Hip & Knee Replacement—accounted for 40% of all patients with UTI as a secondary diagnosis, but 80% of potentially nosocomial UTI patients. Treatment for all UTI patients showed widespread Levofloxacin use, regardless of DRG. Of note, most UTI's were related to E. Coli, which can be treated more cost-effectively with trimethoprim sulfamethoxazole. **CONCLUSIONS:** Based on this investigation, the hospital re-initiated the National Nosocomial Infections Surveillance System program for UTI's, evaluated Levofloxacin use, developed physician guidelines for UTI diagnosis and treatment, and increased nursing education concerning catheter care and maintenance protocols.